

TASK II: PREPARATION OF DEVELOPMENT OPTIONS

DISCUSSION DOCUMENT

Prepared for:

**OFFICE OF STATE PLANNING
STATE OF NEW HAMPSHIRE
2 1/2 BEACON STREET
CONCORD, NEW HAMPSHIRE 03301**

Prepared by:

**TEMPLE, BARKER & SLOANE, INC.
33 HAYDEN AVENUE
LEXINGTON, MASSACHUSETTS 02173**

January 7, 1986

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I. INTRODUCTION

- The objective of the Task II analysis was to prepare six or more development options for the PPR. From this list of potential options, three are to be selected for detailed evaluation.
- The 13 options prepared by the consultants were based on the Task I: Assessment report and input from interviews conducted by the consultants.
- This document presents a discussion of possible goals and objectives for waterfront development and the potential development options prepared by the consultants.
- The intent of this document is to provide the necessary information for the Advisory Committee to reach a consensus on what the goal(s) for waterfront development of the PPR are and to select for detailed evaluation those options that best support the stated goal(s).
- Economic information relating to the costs and benefits of various options represent order of magnitude estimates based on information in existing documents, preliminary engineering estimates developed by the consultants, and estimates of the potential market demand for each activity associated with a development option. The benefit data is intended to provide the Advisory Committee with an indication of the potential benefits to be realized rather than a definitive statement of existing market demand.

II. GOALS FOR WATERFRONT DEVELOPMENT

A. INTRODUCTION

- If the study objectives are to be achieved, the Advisory Committee must explicitly state the goal(s) to be achieved in formulating a plan for developing the PPR.
- Absent of goal(s), the development plan lacks direction, becomes disjointed, and potentially conflicts both with existing activities and with itself. Therefore, the first step in the selection of development options for which detailed evaluations will be performed in Task III is the selection of development goal(s).

B. POTENTIAL GOAL(S) OF WATERFRONT DEVELOPMENT

- A goal is defined as the central charter or mission of an organization or an activity. Within the context of developing the PPR, it should be the reason(s) why development is pursued.
- The development goal(s) in the broadest sense can be to preserve or increase existing water-dependent, water-related, or water-enhanced activities--or to provide for new forms of these activities.

Goals for Waterfront Development
Potential Goals for Waterfront Development

- Existing water-dependent activities within the PPR include:
 - Industrial
 - Commercial marine (cargo vessels, tall ships, Navy ships)
 - Commercial fishing (state fish pier, private fish piers)
 - Recreational fishing (party boats)
 - Tour boats
 - Recreational boating (moorings and marinas)
 - Passive recreation (parks)
- Goals for preserving or increasing existing waterfront activities could include:
 - Preserve or expand existing land designated for industrial use
 - Increase commercial marine cargo activities
 - Increase commercial marine non-cargo activities (commercial fishing, tour boats, etc.)
 - Fulfill existing demand for water-dependent recreational activities
 - Preserve or increase public access to waterfront
 - Maximize economic return to the local community
 - Increase water-related tourist activities

Goals for Waterfront Development
Potential Goals for Waterfront Development

- Goals for providing new activities would be oriented to the specific activity. For example, the goal supporting cruise ship activity might be "to provide facilities and support for attracting a seasonal cruise ship service to the PPR."
- The Advisory Committee, with the aid of consultants must establish a consensus on the goal(s) for developing the PPR before options can be considered.

III. DEVELOPMENT OPTIONS

- The consultants have prepared 13 development options for consideration by the Advisory Committee. The options and their estimated impacts are contained in Exhibits 1 through 9.
- The options are based on the Task I: Assessment analyses and interviews.
- The options are intended to provide a basis for discussion and selection of the three options for which detailed evaluations will be conducted.
- Developments of estimated costs in most instances required the selection of a specific site--State Pier, for example. However, since most options could occur at one or more existing sites, the Committee should not feel constrained by the consultants' site selection. The important issue is the activity and whether or not it fulfills the consensus development goals.

Exhibit 1
TASK II: DEVELOPMENT OPTIONS
COMMERCIAL MARINE

| Development Options | Costs | Benefits | Impacts | | | Engineering Considerations |
|--|--|---------------------------|--|--|------------------------------------|---|
| | Public/Private | Public/Private | Environmental | Socioeconomic | Management | |
| Create a dredge spoil containment area | \$4,000,000-\$6,000,000 ^a (P) | \$0 ^b (P) | Typical impacts of near-shore marine construction ^c Displacement of environmental wetlands | Provides substantial acreage for development | State directly or through a lessee | Access to Market Street and to existing port authority facility Alternative uses |
| Including a 500 foot multi purpose berth | \$7,000,000-\$8,000,000 ^a (P) | \$25,000 ^d (P) | Typical impacts of near-shore marine construction ^c Displacement of environmental wetlands | Provides substantial acreage for development | State directly or through a lessee | Access to Market Street and to existing port authority facility Alternative uses |

P = Public.

^aCost depends upon type of construction and intended use.

^bNo benefits pending development of the containment area for one or more water dependent uses. An alternative benefit of the containment area would be its sale value of an estimated eight acres of land @ \$1,000,000 per acre.

^cTemporary increase in turbidity of water, disruption of benthic organisms, pile driving noises, etc.

^dMinimum revenue realized from tourboat lease of one acre parcel @ \$0.50/square foot and \$3,000 in dockage and wharfage fees from four calls by a coastal cruise ship.

Source: TBS.

Exhibit 2

TASK II: DEVELOPMENT OPTIONS

COMMERCIAL MARINE

| Development Options | Costs | Benefits | Impacts | | | Engineering Considerations |
|---------------------------|------------------------------|---|---|--|-------------------------------------|--|
| | Public/Private | Public/Private | Environmental | Socioeconomic | Management | |
| Adding a Ro/Ro capability | \$2,800,000 ^a (P) | \$22,000 ^b (P)-\$36,400 ^c (P) | Typical impacts of near-shore marine construction Increased truck traffic on Market Street | Potential increase in ocean services and traffic to NH | State: Directly or through a lessee | Location of alignment alternatives Construction alternatives Accommodate stern and side ramp vessels |

P = Public.

^aIncludes pile supported deck with access bridge to land, 44,840 square feet at \$62.50 per square foot.

^bMinimum revenue realized from tourboat lease of 1 acre parcel at \$0.50/square foot, assuming no Ro/Ro service is attracted to Portsmouth.

^cPotential dockage/wharfage revenues to Port Authority if a weekly Ro/Ro service loading/discharging 60 trailers per week were attracted to Portsmouth. The market potential for such service has not been determined.

Source: TBS.

Exhibit 3

TASK II: DEVELOPMENT OPTIONS

COMMERCIAL MARINE

| Development Options | Costs | Benefits | Impacts | | | Engineering Considerations |
|---------------------------|-------------------------------|---|---|--|-------------------------------------|---|
| | Public/Private | Public/Private | Environmental | Socioeconomic | Management | |
| Building a second berth | \$8,600,000 ^a (P) | \$25,000 ^b (P) | Typical impacts of near-shore marine construction Displacement of environmental habitats Dredging, increased truck traffic on Market Street | Potential increase in ocean services and traffic to NH | State: Directly or through a lessee | Location of alignment alternatives Construction alternatives |
| Including RoRo capability | \$10,500,000 ^a (P) | \$25,000 ^b (P)-\$36,400 ^c (P) | Typical impacts of near-shore marine construction Displacement of environmental habitats Dredging, increased truck traffic on Market Street | Potential increase in ocean services and traffic to NH | State: Directly or through a lessee | Location of alignment alternatives Construction alternatives |

P = Public.

^aAssumes 600 foot berth at \$14,330/lineal foot including provision for some backup land. Addition of Ro/Ro capability adds an estimated \$1.9 million to cost.

^bMinimum revenue realized from tourboat lease of one acre parcel at \$0.50/square foot and \$3,000 in dockage and wharfage fees from four calls by a coastal cruise ship.

^cPotential dockage/wharfage revenues to Port Authority if a weekly Ro/Ro service loading/discharging 60 trailers per week was attracted to Portsmouth. The market potential for such service has not been determined.

Source: TBS.

Exhibit 4

TASK II: DEVELOPMENT OPTIONS

MARINE COMMERCIAL

| Development Options | Costs | Benefits | Impacts | | | Engineering Considerations |
|---------------------------------|---------------------------------|-------------------------------|---------------|--|---|----------------------------|
| | Public/Private | Public/Private | Environmental | Socioeconomic | Management | |
| Sale of Port Authority facility | No direct expenditures required | \$12,000,000 ^a (P) | None | Loss of international gateway for NH commerce Reduction in state controlled waterfront property | Potentially requires legislative action | None |

P = Public.

^aSale of an estimated twelve acres at \$1,000,000 per acre.

Source: TBS.

Exhibit 5

TASK II: DEVELOPMENT OPTIONS

COMMERCIAL MARINE--NON CARGO RELATED

| Development Option | Costs | Benefits | Impacts | | | Engineering Consideration |
|--|----------------------------|---|---|--|-------------------------------|---------------------------|
| | Public/Private | Public/Private | Environmental | Socioeconomic | Management | |
| Provide for combined party boat and lobster boat facility at Pierce Island | \$330,000 ^a (P) | \$108,000 ^b (R) \$32,000 ^c (P) | Typical impacts of near-shore marine construction Increased public/pedestrian traffic and parking on Pierce Island | Increase waterborne recreational activity Increase commercial fishing activity Competition with private facilities | State: Directly or via lessee | None |

R = Private.

P = Public.

^a100' x 40' dock @ \$50/ft² berth; dredging of 3,000 cubic yards @ \$20/yard; dockside support facilities @ \$70,000.

^bGross revenues to private party boat operator from 30 participants, 2 trips per day, \$15 per person and 120 days.

^cFrom debt service returned to State based on amortization of \$330,000 over 30 years at 10 percent interest. Revenues from lobstering, which would most likely be based on a percentage of the ad valorem value of the landed catch, are not included.

Exhibit 6

TASK II: DEVELOPMENT OPTIONS

COMMERCIAL MARINE--NON CARGO

| Development Option | Costs | Benefits/Year | Impacts | | | Engineering Consideration |
|---|------------------------------|---|---|--|--|---------------------------|
| | Public/Private | Public/Private | Environmental | Socioeconomic | Management | |
| Provide for additional tourboat activity at Port Authority Pier | \$650,000 ^a (P) | \$142,500 ^c (R) \$22,000 ^b (P) | Typical impacts of near-shore marine construction Increased traffic, public/pedestrian traffic Parking for cars | Economic impact of passenger expenditures on local economy | State: Directly or through lessees Potential conflict with construction of second berth | None |
| Provide for combination cruise/tour boat activity | \$1,360,000 ^d (P) | \$142,500 ^c (R) \$25,000 ^e (P) | Same as above | Same as above | Same as above | Same as above |

P = Public.

^a300 linear foot bulkhead @ \$1,900/lineal foot; dredging 3,000 cubic yards @ \$20/cubic yards; \$20,000 contingencies.

^bLease revenues from one acre.

^cAnnual gross revenue projections based on 7,500 passengers per year and \$19 per passenger.

^d500 linear foot bulkhead @ \$2,300/lineal foot; dredging 8,000 cubic yards @ \$20/cubic yards; \$50,000 contingencies.

^eSame as footnote b plus \$3,000 in dockage/wharfage fees from 4 calls per annum by coastal cruise ship. The market potential for such service has not been determined.

Note: These options are in addition to Viking Cruises' Phase I development of Barker Wharf.

Source: YBS.

Exhibit 7

TASK II: DEVELOPMENT OPTIONS

RECREATIONAL BOATING

| Development Option | Costs | Benefits | Impacts | | | Engineering Consideration |
|---|---------------------------|---|--|---|------------|---------------------------|
| | Public/Private | Public/Private | Environmental | Socioeconomic | Management | |
| Expand Pierce Island boat ramp facility (30' x 40' addition and parking for 24 cars and trailers) | \$50,000 ^a (P) | \$3,600/yr ^b (P) (public use) \$4,000/yr ^c (P) (private use) | Oil spills Increased automobile traffic Increased engine noise | Increased water access for recreational use | City | None |

^aincludes clearing, grabbing, fill; parking lot grading; driveway/parking paving.

^bPublic use of ramp \$2/boat x 120 days @ 50% utilization for 30 boats.

^cMarina owner use of public ramp \$5/boat x 400 boats/yr, 2 times/yr.

Exhibit 8

TASK II: DEVELOPMENT OPTIONS

RECREATIONAL BOATING

| Development Option | Costs | Benefits | Impacts | | | Engineering Consideration |
|---|------------------------------|--|---|---|-----------------------|---------------------------|
| | Public/Private | Public/Private | Environmental | Socioeconomic | Management | |
| Provide for recreational boating activities at Pierce Island: 150 slip marina with support facilities | \$1,590,000 ^a (P) | \$115,000 ^b (R) \$101,000 ^c (P) | Typical impacts of near-shore marine construction Additional river traffic Risk of oil spills | Increase in retail sales to community and marine businesses Significant increases in traffic and parking to/from Pierce Island | State: Through lessee | None |

R = Private.

P = Public.

^a150 slips @ estimated \$7,000/slip; \$280,000 for shoreside facilities; \$260,000 for breakwaters and beach protection.

^bGross revenues of \$91,000 from 140 slips @ \$650 each for seasonal rental and 10 transient ships for \$24,000.

^cAmortization of State investment based on 30 years at 10 percent per year.

Exhibit 9

TASK II: DEVELOPMENT OPTIONS

RECREATIONAL

| Development Options | Costs | Benefits | Impacts | | | Engineering Consideration |
|-----------------------------------|------------------------------|---|--|---|---|---------------------------|
| | Public/Private | Public/Private | Environmental | Socioeconomic | Management | |
| Create public walkway | \$900,000 ^a (P) | N.A. | Typical impacts of near-shore marine construction ^e Increased pedestrian traffic | Increased waterfront access by public | City | None |
| Create public walkway with marina | \$1,250,000 ^b (P) | \$24,000/yr ^c (seasonal) P/R \$18,000/yr ^d (transient) P/R | Provide pumpout station Risk of oil spills Engine noise | Increased waterfront access by public for recreational use Parking for 40 cars | City or State: Directly or through lessee | None |

N.A. = Not applicable.

^a\$50/ft² x 600' x 30'.

^b\$7,000/slip including sewer/water x 50 slips in addition to cost of walkway.

^c40 slips @ \$600/season.

^d10 transient slips, 50% occupancy, \$30/night, 120 days.

^eTemporary increased turbidity, disruption of benthic organisms, pile driving noise, etc.

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